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November 28, 2006

Marlene H. Dortch, Esquire Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Washington, D.C. 20554

Re: FCC 06-103 - Notice of Proposed Rulemaking, Notice of Inquiry and Order; ET Docket No. 06-135, RM-11271

Dear Ms. Dortch:

STMicroelectronics is pleased to support the FCC's proposed MedRadio service to accommodate "a variety of new medical devices that rely on radiocommunication for critical aspects of their functionality." Over the coming years, medical device applications that incorporate wireless communications capabilities will expand greatly along with the number of patients that rely upon such devices. As FCC Chairman Martin explained in approving the agency's proposed spectrum allocation, the "use of wireless technologies in implantable and body-worn medical devices is improving and extending patients' lives."

STMicroelectronics, a semiconductor supplier that was created in 1987 by the merger of SGS Microelettronica of Italy and Thomson Semiconducteurs of France, has pursued an aggressive growth strategy. The company has forged strategic alliances with blue-chip customers and academia located around the globe and has major manufacturing facilities on four continents.

Since its formation, STMicroelectronics has grown faster than the semiconductor industry as a whole. Since 1999, the company has been

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<sup>&</sup>lt;sup>1</sup> See NPRM/NOI at ¶ 1 (July 18, 2006).

<sup>&</sup>lt;sup>2</sup> See NPRM/NOI - Statement of Chairman Kevin J. Martin.

among the world's top ten semiconductor suppliers, and in 2005, for example, net revenues were US \$8.88 billion. The company has focused quite heavily on R&D, spending US \$1.63 billion in 2005.

STMicroelectronics strongly supports the FCC's proposal to allocate the 401-402 MHz and 405-406 MHz "wing" bands for use by body-worn and implantable medical devices. STMicroelectronics also supports the FCC's proposed two-tiered operational structure in the wing bands that allows lower-power, lower-duty-cycle operations for medical devices that do not sense the spectrum prior to transmitting and requires devices that transmit with a higher duty cycle or higher power to be frequency agile and perform channel sensing. The two-tiers of operation is sound and workable. STMicroelectronics also approves of the FCC's decision to maintain the current regulations that govern channel access in the Medical Implant Communications Service in the core 402-405 MHz band given the critical nature and inherent limitations of implantable medical devices.

As explained in the FCC's proposal, protecting medical communications links from interruption or blockage due to interference is a very serious concern—especially given the variety of environments in which medical devices need to operate reliably. These devices must be able to proactively avoid interference because they will support life-critical functions and associated communications. Therefore, the FCC's regulations should strive to ensure that technical solutions to interference issues are implemented, especially since the use of wireless medical devices and sensors will increase greatly over the coming years.

As noted in the opening comments, physicians will use devices operating in this spectrum to control and to collect data from patient devices, such as insulin pumps, blood glucose sensors, oxygen sensors, chronic pain control devices, and neural stimulators. Simple and useful body area networks made up of medical sensors configured to perform therapeutic and diagnostic functions automatically will improve the quality of patient care.

In addition, given the company's international presence, STMicroelectronics is particularly pleased that the FCC has identified spectrum that would be compatible internationally, in accord with ITU-R Recommendation SA.1346, Sharing Between The Meteorological Aids Service and Medical Implant Communications Systems (MICS) Operating in the Mobile Service In the Frequency Band 401-406 MHz.

We look forward to the prompt authorization of the FCC's proposals in view of the wide base of support expressed in the opening comments.

Sincerely,

Ruben Sonnino

Advanced Analog & Logic Division General Manager MPA Group (Micro, Power, Analog) Vice President